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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/699,230	10/31/2003	Muhannad S. Bakir	62020-1400	3379
24504	7590	08/24/2005	EXAMINER	
THOMAS, KAYDEN, HORSTEMEYER & RISLEY, LLP 100 GALLERIA PARKWAY, NW STE 1750 ATLANTA, GA 30339-5948			RUDE, TIMOTHY L	
			ART UNIT	PAPER NUMBER
			2883	

DATE MAILED: 08/24/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/699,230

Applicant(s)

BAKIR ET AL.

Examiner

Timothy L. Rude

Art Unit

2883

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 1 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 14 March 2005.
2a) ☐ This action is FINAL. 2b) ☐ This action is non-final.
3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-39 is/are pending in the application.
4a) Of the above claim(s) 35-39 is/are withdrawn from consideration.
5) ☐ Claim(s) _____ is/are allowed.
6) ☐ Claim(s) _____ is/are rejected.
7) ☐ Claim(s) _____ is/are objected to.
8) ☒ Claim(s) 1-34 are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Election/Restrictions

1. Applicant's election without traverse of Invention I in the reply filed on 14 March 2005 is acknowledged.

Claims 35-39 are withdrawn from further consideration pursuant to 37 CFR 1.142(b) as being drawn to a nonelected invention, there being no allowable generic or linking claim. Election was made **without** traverse in the reply filed on 14 March 2005.

2. Upon more careful consideration, it is clear the instant Application still contains numerous species of at least two inventions. Accordingly, the following restriction is applied. Please note, due to the complexity of the species and sub-species, the following restriction might not be complete, so yet another restriction might be applied subsequent to Applicant's election.

3. Restriction to one of the following inventions is required under 35 U.S.C. 121:

- III. Claims 27-28 and 33-34, drawn to a method of directing energy, classified in class 392, subclass 375+.
- IV. Claims 1-26 and 29-32, drawn to an optical waveguide and/or system, classified in class 385, subclass 14.

The inventions are distinct, each from the other because of the following reasons:

Inventions IV and III are related as product and process of use. The inventions can be shown to be distinct if either or both of the following can be shown: (1) the process for using the product as claimed can be practiced with another materially different product or (2) the product as claimed can be used in a materially different process of using that product (MPEP § 806.05(h)). In the instant case (1) the process can be practiced with a product that having a first portion comprising a second material that is not optically conductive, e.g., metal, and/or having no second substrate.

Because these inventions are distinct for the reasons given above and have acquired a separate status in the art as shown by their different classification, restriction for examination purposes as indicated is proper.

4. Invention III contains claims directed to the following patentably distinct species of the claimed invention:

Species A, drawn to a method comprising the step of providing a second substrate (see base claim 33).

Species B, drawn to a method comprising no step of providing a second substrate (see base claim 27).

5. Invention IV contains claims directed to the following patentably distinct species of the claimed invention:

Species C, drawn to an optical waveguide device comprising a second substrate (see base claim 29).

Species D, drawn to an optical waveguide device comprising no second substrate (see base claim 1).

6. Species C and D contain claims directed to the following patentably distinct sub-species of the claimed invention:

Sub-species E, drawn to a device comprising the optically conductive first material comprises polyimides (see claim 2).

Sub-species F, drawn to a device comprising the optically conductive first material comprises epoxide.

Sub-species G, drawn to a device comprising the optically conductive first material comprises polynorbornenes.

Sub-species H, drawn to a device comprising the optically conductive first material comprises polyarylene ethers.

Sub-species I, drawn to a device comprising the optically conductive first material comprises Parylenes.

Sub-species J, drawn to a device comprising the optically conductive second material comprises polyimides (see claim 3).

Sub-species K, drawn to a device comprising the optically conductive second material comprises epoxide.

Sub-species L, drawn to a device comprising the optically conductive second material comprises polynorbornenes.

Sub-species M, drawn to a device comprising the optically conductive second material comprises polyarylene ethers.

Sub-species N, drawn to a device comprising the optically conductive second material comprises Parylenes.

Sub-species O, drawn to a device wherein the optically conductive second material is the same material as the optically conductive first material (see claim 4).

Sub-species P, drawn to a device wherein the optically conductive second material is not the same material as the optically conductive first material (see claim 5).

Sub-species Q, drawn to a device wherein the first portion and the second portion have substantially the same thickness and width (see claim 6).

Sub-species R, drawn to a device wherein the width of the second portion expands wider but not thicker from the first end to the second end (see claim 7).

Sub-species S, drawn to a device wherein the width of the second portion expands thicker but not wider from the first end to the second end (see claim 8).

Sub-species T, drawn to a device wherein the width of the second portion expands thicker and wider from the first end to the second end (see claim 9).

Sub-species U, drawn to a device wherein the second portion forms a "Y"-shape (see claim 10).

Sub-species V, drawn to a device wherein the width of the second portion is tapered in thickness but not width from the first end to the second end (see claim 11).

Sub-species W, drawn to a device wherein the width of the second portion tapered in width but not thickness from the first end to the second end (see claim 12).

Sub-species X, drawn to a device wherein the width of the second portion tapered in thickness and width from the first end to the second end (see claim 13).

Sub-species Y, drawn to a device comprising a second layer disposed between the off-surface and curved optical waveguide and the first substrate (see claim 15).

Sub-species Z, drawn to a device comprising a second layer disposed on the off-surface and curved optical waveguide on the side opposite the first substrate (see claim 16).

Sub-species AA, drawn to a device comprising a second layer that is a waveguide cladding layer (see claim 17).

Sub-species AB, drawn to a device comprising a second layer that is an optical coupler layer.

Sub-species AC, drawn to a device comprising a second layer that is a capacitive coupler layer

Sub-species AD, drawn to a device comprising a second layer that is a metal layer.

Sub-species AE, drawn to a device comprising a second layer that is a specific combination of a waveguide cladding layer, an optical coupler layer, a capacitive coupler layer, and a metal layer (if electing sub-species AE, please specify which specific combination Applicant wants examined).

Sub-species AF, drawn to a device comprising a second layer that is an electrical lead (see claim 18).

Sub-species AG, drawn to a device comprising a second layer that is a radio frequency lead.

Sub-species AH, drawn to a device comprising a second layer that is a specific combination of an electrical lead and a radio frequency lead (if electing sub-species AH, please specify which specific combination Applicant wants examined).

Sub-species AI, drawn to a device comprising a second portion that includes at least one curved portion curving away from the first substrate and at least one portion substantially parallel to the first substrate (see claim 23).

Sub-species AJ, drawn to a device comprising a second portion that includes at least one curved portion curving away from the first substrate and no portion substantially parallel to the first substrate.

Sub-species AK, drawn to a device wherein the off-surface and curved optical waveguide is included in a clock distribution system.

Sub-species AL, drawn to a device wherein the off-surface and curved optical waveguide is included in a signal distribution system.

Sub-species AM, drawn to a device wherein the off-surface and curved optical waveguide is included in a microelectronic device.

Sub-species AN, drawn to a device wherein the off-surface and curved optical waveguide is included in a integrated optical device.

7. Species C contains claims directed to the following patentably distinct sub-species of the claimed invention:

Sub-species AO, drawn to a device comprising a second off-surface and curved optical waveguide including a second layer that is a waveguide cladding layer (see claim 32).

Sub-species AP, drawn to a device comprising a second off-surface and curved optical waveguide including a second layer that is a metal layer.

Sub-species AQ, drawn to a device comprising a second off-surface and curved optical waveguide including a second layer that is a specific combination of a

waveguide cladding layer and a metal layer (if electing sub-species AQ, please specify which specific combination Applicant wants examined).

Sub-species AR, drawn to a device comprising a first off-surface and curved optical waveguide including a second layer that is a waveguide cladding layer (see claim 31).

Sub-species AS, drawn to a device comprising a first off-surface and curved optical waveguide including a second layer that is a metal layer.

Sub-species AT, drawn to a device comprising a first off-surface and curved optical waveguide including a second layer that is a specific combination of a waveguide cladding layer and a metal layer (if electing sub-species AT, please specify which specific combination Applicant wants examined).

Applicant is required under 35 U.S.C. 121 to elect a single disclosed sub-species from each set E-I, J-N, O-P, Q-X, Y-Z, AA-AH, AI-AJ, AK-AL, AM-AN, of species D of invention IV or a single disclosed sub-species from each set E-I, J-N, O-P, Q-X, Y-Z, AA-AH, AI-AJ, AK-AL, AM-AN, AO-AQ, AR-AT of species C of invention IV or a single disclosed species from A-B of invention III for prosecution on the merits to which the claims shall be restricted if no generic claim is finally held to be allowable. Currently, claim 27 is generic to the species of invention III and claim 1 is generic to the species of invention IV.

Applicant is advised that a reply to this requirement must include an identification of the species that is elected consonant with this requirement, and a listing of all claims readable thereon, including any claims subsequently added. An argument that a claim is allowable or that all claims are generic is considered nonresponsive unless accompanied by an election.

Upon the allowance of a generic claim, applicant will be entitled to consideration of claims to additional species which are written in dependent form or otherwise include all the limitations of an allowed generic claim as provided by 37 CFR 1.141. If claims are added after the election, applicant must indicate which are readable upon the elected species. MPEP § 809.02(a).

Should applicant traverse on the ground that the species are not patentably distinct, applicant should submit evidence or identify such evidence now of record showing the species to be obvious variants or clearly admit on the record that this is the case. In either instance, if the examiner finds one of the inventions unpatentable over the prior art, the evidence or admission may be used in a rejection under 35 U.S.C. 103(a) of the other invention.

Applicant is advised that the reply to this requirement to be complete must include an election of the invention to be examined even though the requirement be traversed (37 CFR 1.143).

Applicant is reminded that upon the cancellation of claims to a non-elected invention, the inventorship must be amended in compliance with 37 CFR 1.48(b) if one or more of the currently named inventors is no longer an inventor of at least one claim remaining in the application. Any amendment of inventorship must be accompanied by a request under 37 CFR 1.48(b) and by the fee required under 37 CFR 1.17(i).

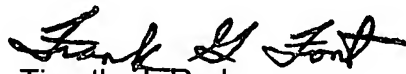
Any inquiry concerning this communication or earlier communications from the examiner should be directed to Timothy L. Rude whose telephone number is (571) 272-2301. The examiner can normally be reached on Mon-Thurs.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Frank G. Font can be reached on (571) 272-2415. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



tlr



Timothy L Rude
Examiner
Art Unit 2883